PUBLIC NOTICE

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BROADBAND DATA TASK FORCE PUBLISHES DATA SPECIFICATION FOR BULK CHALLENGES OF BROADBAND SERVICEABLE LOCATION FABRIC DATA AND PROVIDES FURTHER DETAILS ON FABRIC LOCATIONS DATA

WC Docket Nos. 19-195, 11-10

By this *Public Notice*, the Broadband Data Task Force (Task Force), Wireline Competition Bureau (WCB), and Office of Economics and Analytics (OEA) announce the release of *Data Specifications for Bulk Fabric Challenge Data*, which sets forth the requirements for filing bulk challenges to broadband serviceable location (BSL) data in the Broadband Serviceable Location Fabric (Fabric). The Bulk Fabric Data Specification is available at: https://us-fcc.box.com/v/bdc-bulk-fabric-challenge-spec. This *Public Notice* also provides further details on which locations are considered BSLs in the production version of the Fabric.

The Fabric is a common dataset of all locations in the United States where fixed broadband Internet access service can be installed and will serve as the foundation on which fixed broadband providers' availability data will be overlaid.[1] Fixed Broadband Data Collection (BDC) filers that report their broadband availability data using a list of locations must match their locations to the BSL data in the Fabric.[2] The production version of the Fabric is now available to BDC filers and state, local and Tribal government entities.[3]

Service providers, governments, and other entities and organizations can submit challenges, or proposed corrections, to location data in the Fabric.[4] If the same entity submits multiple Fabric challenges at the same time, then those "bulk" challenges must be submitted in the BDC system via file upload and must conform to the specifications set forth in the *Data Specifications for Bulk Fabric Challenge Data*. Some of the information that bulk Fabric challengers must include are the entity's name

[1] Broadband Deployment Accuracy and Technology Availability Act, Pub. L. No. 116-130, 134 Stat. 228 (2020) (codified at 47 U.S.C. §§ 641-646) (Broadband DATA Act); *Establishing the Digital Opportunity Data Collection; Modernizing the FCC Form 477 Data Program*, WC Docket Nos. 19-195, 11-10, Second Report and Order and Third Further Notice of Proposed Rulemaking, 35 FCC Rcd 7460, 7483-84, paras. 52-54 (2020) (*Second Order and Third Further Notice*); *Establishing the Digital Opportunity Data Collection; Modernizing the FCC Form 477 Data Program*, WC Docket Nos. 19-195, 11-10, Third Report and Order, 36 FCC Rcd 1126, 1175-77, paras. 126-32 (2021) (*Third Report and Order*); *Broadband Data Task Force Announces Access to Preliminary Broadband Serviceable Location Fabric To Fixed Service Providers and Guidance for Filing Fixed Broadband Availability Data*, WC Docket Nos. 19-195, 11-10, Public Notice, DA 22-413 (BDTF, OEA, WCB Apr. 14, 2022) (*First Fabric Public Notice*).

[2] As noted in the *First Fabric Public Notice*, "fixed broadband service providers that do not report using availability polygons must submit their broadband availability data using Location IDs that match the unique Commission-issued Location IDs in the production version of the Fabric." *First Fabric Public Notice* at 7.

[3] *See Broadband Data Task Force Announces the Availability of the Production Version of the Broadband Serviceable Location Fabric*, WC Docket Nos. 19-195, 11-10, Public Notice, DA 22-668 (BDTF June 23, 2022).

[4] 47 U.S.C. § 642(a)(1)(B)(iii), (b)(5); 47 CFR § 1.7006(d).

and contact information, the locations subject to challenge, the category of the challenge for each, and evidence to support the challenge. Each bulk Fabric challenge data file must include records for each location being challenged in a Comma Separated Value (CSV) format, all fields must be included in the file upload, and all values must conform to the descriptions, codes, or formats identified for each field in the *Data Specifications for Bulk Fabric Challenge Data*.

With regard to the BSLs that form the basis for the Fabric, and that can be the subject of bulk challenges, in the *Third Report and Order*, the Commission directed OEA, in consultation with WCB, to: (1) determine what additional features or datasets are both available and useful for inclusion in the Fabric;[5] (2) ensure locations, such as marinas, mobile home parks, and homes without electric power, reflect broadband serviceability to the extent they are able to make determinations given the available data;[6] (3) ensure that the treatment of mixed business/residential locations reflect broadband serviceability to the extent they are able to make determinations given the available data;[7] and (4) analyze the possibility of identifying each unit in an multiple tenant environment (MTE) during the procurement process.[8] Pursuant to this direction, in the *First Fabric Public Notice,* we provided details on the Fabric developed in the procurement process and in consultations with the vendor.[9] In this *Public Notice*, we continue to carry out the Commission's direction by addressing additional characteristics of BSLs for purposes of the Fabric so that challengers will be able to align their data with the Fabric to determine when BSLs may be missing or mischaracterized.

Broadband Serviceable Locations

For purposes of the Fabric, a broadband serviceable location is defined as "a business or residential location in the United States at which fixed broadband Internet access service is, or can be, installed."[10] A residential BSL includes all residential structures,[11] including structures that are (or contain) housing units or group quarters (as those terms are defined by the United States Census Bureau).[12] A business BSL includes "all non-residential (business, government, non-profit, etc.) structures that are on property without residential locations and that would expect to demand broadband

[5] *Third Report and Order*, 36 FCC Rcd at 1177, para. 132.

[6] *Id.* at 1176-77, para. 129 (noting that, while "[w]e anticipate that the Fabric will include all individual structures to which broadband internet access service can be installed. . . . [t]here may be some circumstances . . . where counting each individual building or structure might not reflect the way broadband service is provisioned (e.g., broadband may not be deployed individually to each occupied boat in a marina or to a central location in the marina; or to homes without electric power)").

[7] *Id.* at 1177, para. 130.

[8] *Id.*

[9] *See First Fabric Public Notice*, at 6-7.

[10] *Third Report and Order*, 36 FCC Rcd at 1175, para. 126. Broadband Internet access service is defined as "a mass-market retail service by wire or radio that provides the capability to transmit data to and receive data from all or substantially all [I]nternet endpoints, including any capabilities that are incidental to and enable the operation of the communications service, but excluding dial-up [I]nternet access service. This term also encompasses any service that the Commission finds to be providing a functional equivalent of the service described in the previous sentence or that is used to evade the protections set forth in this part." 47 U.S.C. § 641(1); 47 CFR § 8.1(b).

[11] For purposes of the Fabric, "structures" refer to physical building footprints, regardless of whether any identifying information for the footprint is included in the Fabric; "locations" refer to structures for which there is identifying information included in the Fabric, regardless of whether they are identified as BSLs in the Fabric; "BSLs" are the subset of locations for which identifying information is included in the Fabric and for which the BSL Flag field includes an indicator response of "TRUE."

[12] *Third Report and Order*, 36 FCC Rcd at 1176, para. 127; *see also Housing Vacancies and Homeownership*, *Definitions,* https://www.census.gov/housing/hvs/definitions.pdf (last visited June 14, 2022).

Internet access service."[13] The Fabric reflects each BSL as a single point defined by a set of geographic coordinates that fall within the footprint of a structure,[14] and each such location has been assigned a unique Commission-issued Location ID.[15] The Commission acknowledged that including all structures in the Fabric may not accurately reflect how broadband is provisioned and directed OEA, in consultation with WCB, to ensure that locations in the Fabric accurately reflect determinations as to broadband serviceability to the extent such determinations can be made given the data available.[16]

As an initial matter, the Task Force announced in the *First Fabric Public Notice* that the data sources to be used in identifying the locations listed in the Fabric will include "a mix of satellite imagery, building footprints, address databases, land and local tax records, and other sources that the vendor finds as either necessary or beneficial for determining, as completely as possible, the locations of structures throughout the United States where fixed broadband service can be installed."[17] However, the amount and quality of location data, and the extent to which such data have been digitized, vary greatly across the country because there are no uniform standards for how local jurisdictions collect, maintain, and publish such data.[18] In order to refine the Fabric data over time, the Broadband DATA Act and Commission rules incorporate a process for entities to challenge locations in the Fabric that they believe have been misidentified or mischaracterized.[19]

Residential Parcels:

For a single residential parcel with one single-family home, the structure of the single-family home will be identified as one BSL in the Fabric.[20] Similarly, an individual town home or row house that is on its own parcel will be identified as one BSL. In situations where there is one residential structure, but more than one housing unit on the parcel (for example, a duplex, a triplex, an apartment building, or a home with a basement apartment), the Fabric identifies the structure as one BSL, but includes the number of separate housing units at the location in the Unit Count field, to the extent such data are readily available (e.g., where unit counts are included as part of public land records).[21]

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[13] *Third Report and Order*, 36 FCC Rcd at 1176, para. 128 (noting also that "we define a building with multiple offices as a single location in the Fabric, and we anticipate that each individual building will be a location. However, as with residential locations, we recognize that there may be instances where it is not appropriate to count every building as a distinct location (e.g., buildings without power or multiple buildings on the same property owned and occupied by the same entity).").

[14] *Third Report and Order*, 36 FCC Rcd at 1175, para. 126.

[15] *First Fabric Public Notice* at 1.

[16] *Third Report and Order*, 36 FCC Rcd at 1176-77, para. 129 (for example, "broadband may not be deployed individually to each occupied boat in a marina or to a central location in the marina; or to homes without electric power").

[17] *First Fabric Public Notice* at 6.

[18] *See* U.S. Government Accountability Office, *Broadband: FCC Is Taking Steps to Accurately Map Locations That Lack Access*, at 15-16 (2021) (*GAO Report*), https://www.gao.gov/assets/720/716822.pdf (reporting that "two data companies said that parcel and county tax data may be reported using a wide variety of unique administrative codes and other non-standard information that could complicate integrating tax data with other location data. . . . As the data aggregated by the data company selected by the FCC will likely need to come from multiple sources, each having different administrative codes and terminologies, these differences would need to be identified and addressed in order for the data to be linked together, according to FCC and state officials.").

[19] 47 U.S.C. § 642(b)(5)(A)(iii); 47 CFR § 1.7006(d).

[20] *See* WTA Comments at 3 (Sep. 9, 2020) ("Single-family homes are relatively easy to identify as 'locations' for mapping and CAF compliance purposes.").

[21] This is in accord with the Commission's treatment of MTEs generally and is based on the same considerations (e.g., the fact that the status of broadband availability is likely to be consistent across all units in a single structure).

(continued….)

A single residential parcel that is identified as a single family residence but has multiple, identifiable single-family, or other single-unit structures (for example, a main home and a separate garage or some other auxiliary standalone dwelling unit) also is identified in the Fabric as a single BSL. In the *Third Report and Order*, the Commission adopted definitions of "residential location" and "business location" that were based on definitions used in connection with the Connect America Fund (CAF), with some modifications, such as the inclusion of group quarters structures in the definition of "residential locations."[22] As a result, the production version of the Fabric accords BSL status to the primary residential structure on a parcel, but not to other structures on the same parcel. While some such additional structures may be classified as broadband serviceable in later versions of the Fabric, currently, the available data do not allow us to determine reliably whether they are owned and/or occupied as a distinct household or are otherwise suitable for a distinct broadband connection.[23] Accordingly, the production Fabric identifies such parcels as having a single BSL.[24] In contrast, on a residential parcel identified as a mobile home park, each mobile home will be considered a distinct, individual BSL because the available data allow us to determine reliably that each individual structure is inhabited by a separate family or entity requiring a distinct broadband connection.[25]

In cases where a residential parcel contains more than one multiple-dwelling-unit structure or other residential MTE structure not identified as a single-family-home, each structure is counted as a distinct BSL in the Fabric, with its own unique FCC identifier, and includes the number of separate housing units in the Unit Count field, if such data are readily available.[26] For example, in the case of

See Third Report and Order, 36 FCC Rcd at 1177, para. 130, citing Comments of Connected Nation at 12 (quoting that "'capturing information on the locations of each unit within every [MTE] across the United States would likely be cost-prohibitive, and also unnecessary, given that broadband service delivered to a given [MTE] structure would be made available to all units within that structure'"). In the case of a duplex or a triplex, the single structure on the residential parcel will include one Location ID record in the Fabric data, with two or three unit counts respectively. *See, e.g.,* USTelecom/WISPA Comments at 18 (Sep. 8, 2020) (stating that "Joint Commenters support the Commission's proposal to consider an [multiple tenant environment (MTE)] to be a single location and, where possible, to require reporting of the number of units associated with that location"); Connected Nation Comments at 12 (Sep. 8, 2020) ("We believe that the total number of units within MTE buildings should certainly be determined, as knowing the total number of units will help the Commission better quantify the impact of funding distributed to support broadband buildout." (bold and italics omitted)).

[22] *Third Report and Order*, 36 FCC Rcd at 1176, para. 127.

[23] *See Third Report and Order*, 36 FCC Rcd at 1176, para. 128 (recognizing that it is "not appropriate to count every building as a distinct location (e.g., buildings without power or multiple buildings on the same property owned and occupied by the same entity)"); *see also* USTelecom/WISPA Reply at 14 (Sep. 17, 2020) (noting that "[b]y including all buildings on a parcel, there would be many extraneous buildings of varying sizes and uses that are not indeed serviceable, ultimately skewing the Fabric's ability to accurately report broadband availability").

[24] Note that the Fabric challenge process will allow for corrections to the Fabric data (assuming a sufficient evidentiary basis) in order to identify multiple dwelling structures on the same parcel as distinct BSLs.

[25] *See, e.g., Third Report and Order*, 36 FCC Rcd at 1176-77, para. 129 n.375 (citing USTelecom/WISPA Comments asking for guidance on the treatment of mobile homes for purposes of the Fabric).

[26] *See Third Report and Order*, 36 FCC Rcd at 1177, para. 130 (stating that "we determine to identify a Multi-Tenant Environment as a single record in the Fabric and, to the extent feasible, to associate the number of units within each Multi-Tenant Environment with the Multi-Tenant Environment's location information in the Fabric"). In this context, a residential MTE means residential premises such as apartment buildings, condominium buildings, or cooperatives that are occupied by multiple residents. *Improving Competitive Broadband Access to Multiple Tenant Environments*, Notice of Inquiry, 32 FCC Rcd 5383, 5383-5384, para. 2 (2017). When referring to residential multiple tenant environments, past Commission rules and actions have sometimes used the term multiple dwelling unit (or MDU). *See, e.g.*, 47 CFR § 76.800(a) (defining an MDU for purposes of the cable inside wiring rules as a "multiple dwelling unit building (e.g., an apartment building, condominium building or cooperative)"); *see also* Connected2Fiber Comments at 8 (Sept. 8, 2020) (noting that "Connected2Fiber believes that each building in an MTE be assigned a unique identifier and the number of units recorded . . .").

multiple condominium or apartment buildings on a single residential parcel, each building will be counted as a distinct BSL.[27]

Non-Residential Parcels:

Generally, the Fabric reflects one representative BSL on a non-residential parcel (including multi-structure parcels) when any of the following circumstances exist: (1) all of the structures on the parcel are commonly owned and/or occupied by a single tenant;[28] (2) there are multiple structures that the available data indicate would be expected to subscribe to mass-market broadband service (for example, libraries, religious centers, or houses of worship); (3) the parcel contains multiple group quarters structures (e.g., dormitories, prisons, or nursing homes); or (4) a recreational area such as a [29] complex, resort, RV park, or marina contains multiple structures. In some limited circumstances, each structure on a parcel identified as commercial, office, or industrial is counted as a separate BSL in the Fabric that the data indicate have distinct occupants or tenants. In contrast, a single structure with multiple office units on a non-residential parcel is designated as a single BSL in the Fabric.[30]

Differentiating Between Mass-Market Broadband Locations and Non-Mass Market Broadband Locations:

As identified in the Fabric, a BSL is a location where fixed mass-market broadband Internet access service has, or could be, installed.[31] However, the production version of the Fabric also includes, but does not identify as BSLs, community anchor institutions and other high-density or high-demand locations.[32] Locations of this type most commonly subscribe to enterprise/business data broadband services, which are not included in the BDC.[33] While these locations may subscribe to mass-market services in some instances, we currently lack data that would enable us to make reliable determinations of when this is the case. The objectives underlying the Broadband DATA Act would not be well served by designating these types of locations as BSLs when they likely would not subscribe to mass-market broadband services. Accordingly, without location-specific data showing otherwise, these locations will not be designated as BSLs in the Fabric. Examples of such locations include office buildings with demand for enterprise-level broadband service and the following types of community anchor institutions: schools; hospitals, including Veteran's Administration facilities; state government buildings and courthouses; executive mansions and state legislative buildings; fire/EMS stations; and Red Cross facilities. In addition, we assume that local government buildings in jurisdictions with a population of at

[27] *Third Report and Order*, 36 FCC Rcd at 1176-77, paras. 128-130.

[28] *Third Report and Order*, 36 FCC Rcd at 1176-77, para. 129 n.375. We find that the same considerations that support assigning one BSL to parcels with multiple single-family residential, or other, structures apply here as well: i.e., the available data do not currently allow us to reliably determine which, if any, additional structures on a multi-structure parcel belong to a separate entity or are otherwise suitable for a distinct broadband connection.

[29] *Third Report and Order*, 36 FCC Rcd at 1176, para. 128.

[30] *Id*.

[31] *Third Report and Order*, 36 FCC Rcd at 1175, para. 126.

[32] *See Third Report and Order,* 36 FCC Rcd at 1135-36, para. 21 ("[community anchor] institutions will be included in the [BDC's] broadband availability reporting to the extent they use mass-market broadband services."). Non-BSL structures will be assigned Location IDs in the Fabric, but will be clearly identified as non-BSLs, subject to additional, site-specific data that demonstrate otherwise. *See, e.g.,* USTelecom/WISPA Reply at 4 (Sep. 17, 2020) ("The Commission could identify in the Fabric which locations are anchor institutions in every community in the country and therefore, when a service provider reports coverage they will be easily identified."); WTA Comments at 5 (Sep. 8, 2020) (stating that "because they receive (or are eligible to receive) Universal Service Fund ('USF') support, schools, libraries and rural health care ('RHC') centers should be included in the subject broadband data collections and included on the resulting broadband service maps").

[33] *See Third Report and Order*, 36 FCC Rcd at 1134-36, para. 19.

least 500,000 are more likely to rely on enterprise or self-provisioned broadband service and will not be identified as BSLs.

As noted above, if the Commission or its contractor obtain information, through a challenge or otherwise, and determines that a building originally identified in the Fabric as taking enterprise broadband services instead takes mass-market broadband Internet access services, then that building will be identified in a future version of the Fabric as a BSL.[34]

For More Information

For information about the Fabric or the Broadband Data Collection, please visit the Broadband Data Collection website at https://www.fcc.gov/BroadbandData. Provider and state, local, and Tribal government questions about how to access the Fabric and about the license agreement associated with the Fabric should be addressed to NBFsupport@costquest.com. Press inquiries should be directed to Anne Veigel at anne.veigel@fcc.gov.

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[34] Such information about the broadband status of a commercial building might come from an investigation by the Commission or its contractor, from the building owner, from a tenant, from a service provider, or from a challenger.